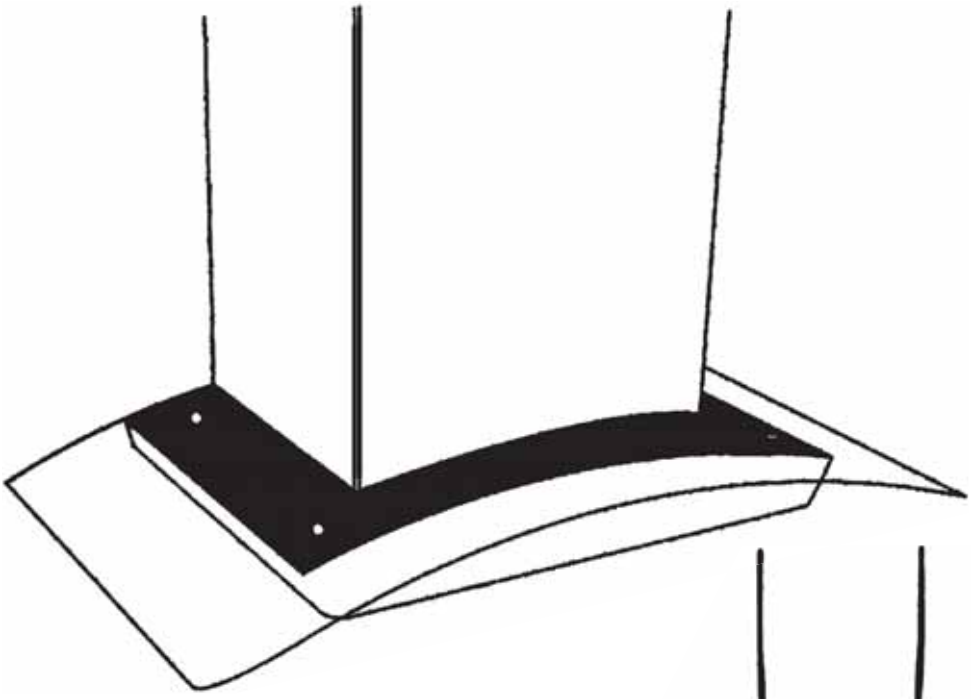
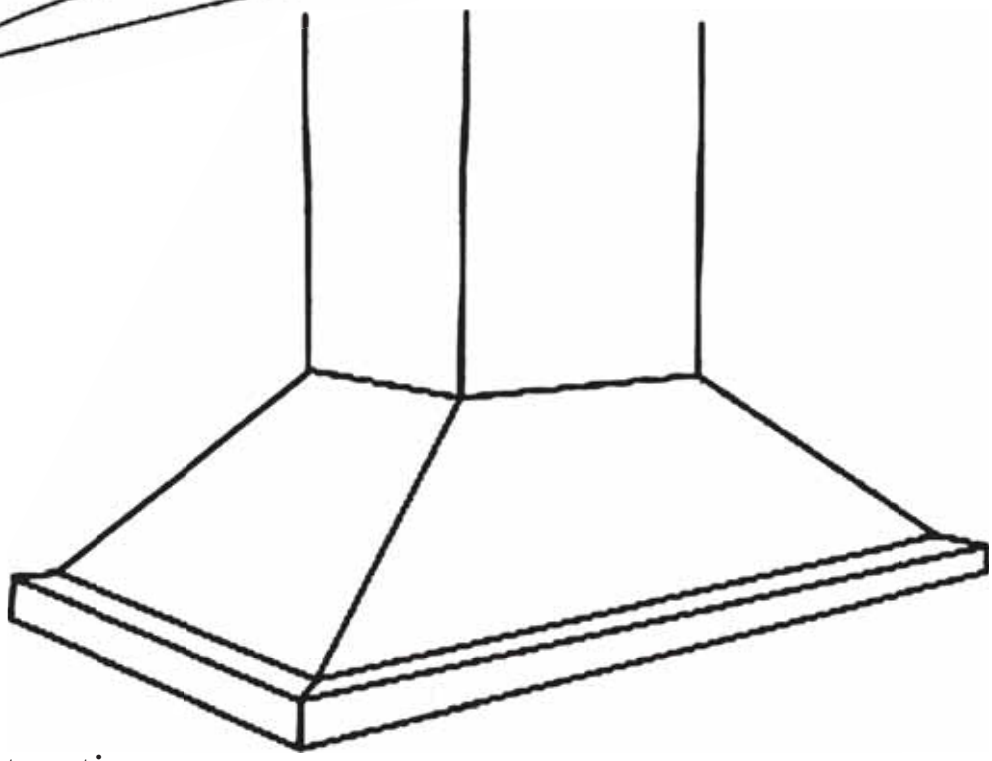
Installation Guide and Users Manual

198 Series

Suitable for:
Standard Class
"R" Class
"E" Class





236536

IMPORTANT:

Read and save these instructions.

NOTICE:
Installer: Leave this guide with the homeowner
Homeowner: Keep this guide for future reference

Signature Hardware

Wall Mount Range Hood

Rev. 1016u.1a

Important Safety Notice

Read all Instructions before Installing and operating this appliance

- The installation in this manual is intended for qualified installers, service technicians or persons with similar qualified background. Installation and electrical wiring must be done by qualified professionals and in accordance with all applicable codes and standards, including fire-rated construction.
- DO NOT attempt to install this appliance yourself. Injury could result from installing the unit due to lack of appropriate electrical and technical background.
- Range hood may have very sharp edges; please wear protective gloves if it is necessary to remove any parts for installing, cleaning or servicing.
- Activating any switch ON before completing installation may cause ignition or an explosion.
- Due to the size and weight of this range hood, two people installation is recommended.

To reduce the risk of fire, electric shock, or injury to persons:

- For general ventilating use only. DO NOT use to exhaust hazardous or explosive materials and vapors.
- The combustion air flow needed for safe operation of fuel-burning equipment may be affected by this unit's operation. Follow the heating equipment manufacturer's guideline and safety standards such as those published by the National Fire Protection Association (NFPA), and the American Society of Heating, Refrigeration and Air Conditioning Engineers (ASHRAE), and the local code authorities.
- Before servicing or cleaning unit, switch power OFF at service panel and lock service panel to prevent power from being switched ON accidentally.
- Clean grease laden surfaces frequently. To reduce the risk of fire and to disperse air properly, make sure to vent air outside. DO NOT vent exhaust into spaces between walls, crawl spaces, ceiling, attics or garages.
- Ducted fans MUST always be vented to the outdoors.
- Use only metal ductwork and this unit MUST be grounded.
- Sufficient air is needed for proper combustion and exhausting of gases through the duct to prevent back drafting.
- When cutting or drilling into wall or ceiling, be careful not to damage electrical wiring or other hidden utilities.
- All electrical wiring must be properly installed, insulated and grounded.
- Old duct work should be cleaned or replaced if necessary to avoid the possibility of a grease fire.
- Check all joints on duct work to insure proper connection and all joints should be properly taped.
- Use this unit only in the manner intended by the manufacturer. If you have questions, contact the vendor.

To reduce the risk of a stove top grease fire:

- Keep all fan, baffle, spaces, filter, grease tunnel, oil container and grease-laden surfaces clean. Grease should not be allowed to accumulate on fan, baffle, spaces, filter, grease tunnel and oil container.
- Always turn range hood ON when cooking at high heat or when cooking flaming foods.
- Use high settings on cooking range only when necessary.
- Never leave surface units unattended at high settings. Boil overs cause smoking and greasy spillovers that may ignite. Heat oils slowly on low or medium settings.

Important Safety Notice

Read all Instructions before Installing and operating this appliance

- Clean ventilating fan frequently.
- Always use appropriate cookware and utensils size.
- Always use cookware appropriate for the size of the surface element.

To reduce the risk of injury to persons in the event of a stove top grease fire:

- SMOTHER FLAMES with a close-fitting lid, cookie sheet, or metal tray, then turn OFF the burner. BECAREFUL TO PREVENT BURNS. NEVER PICK UP A FLAMING PAN—you may be burned. KEEP FLAMMABLE OR COMBUSTIBLE MATERIAL AWAY FROM FLAMES. If the flames DO NOT go out immediately, EVACUATE AND CALL THE FIRE DEPARTMENT or dial your local emergency service immediately.
- DO NOT USE WATER, including wet dishcloths or towels — a violent steam explosion will result.
- Use an extinguisher ONLY if:
  - You know you have a Class A, B, C extinguisher, and you already know how to operate it.
  - The fire is small and contained in the area where it is started.
  - The fire department is being called.
  - You can fight the fire with your back to an exit.

To reduce the risk of injury to persons in the event of a gas leaks:

- Extinguish any open flame.
- DO NOT turn on the range hood fan or any type of ventilator.
- DO NOT turn on the lights or any type of appliance.
- Open all doors and windows to disperse the gas. If you still smell gas, call the gas company and fire department, or dial your local emergency service immediately.

Your safety and the safety of others is very important. We have provided many important safety messages in this manual and on your appliance. Always read and obey all safety messages. All safety messages will tell you what the potential hazard is, tell you how to reduce the chance of injury, and tell you what can happen if the instructions are not followed.

WARNING

This is the safety alert symbol. This symbol alerts you to potential hazards that can hurt you and others. All safety messages will follow the safety alert symbol and the word “WARNING”.

The manufacturer and/or distributor/reseller declines all responsibility in the event of failure to observe the instructions given here for installation, maintenance and suitable use of the product.
The manufacturer and/or distributor/reseller further declines all responsibility for injury due to negligence and the warranty of the unit automatically expires due to improper maintenance.
The manufacturer and/or distributor/reseller will not be held responsible for any damages to personal property or real estate or any bodily injuries whether caused directly or indirectly by the range hood.

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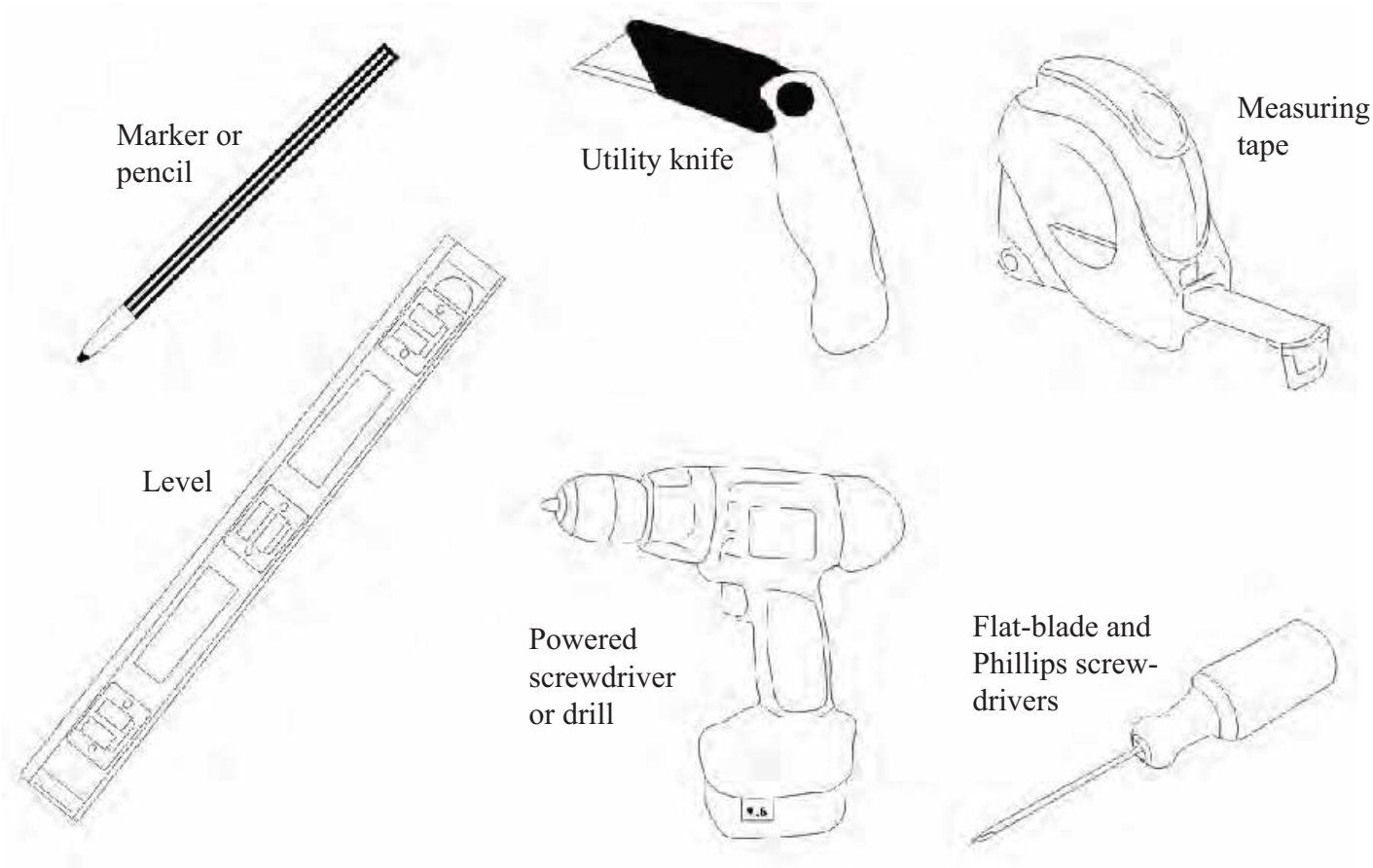
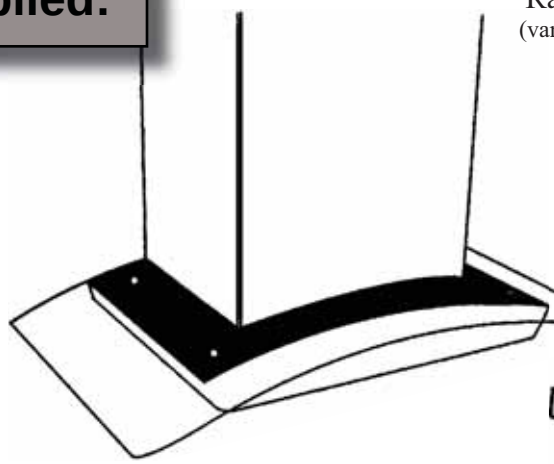
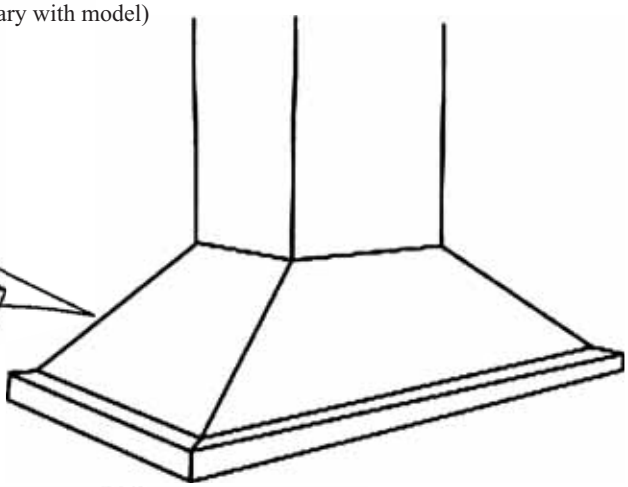
Tools needed:

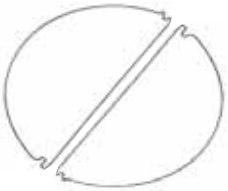


Parts supplied:

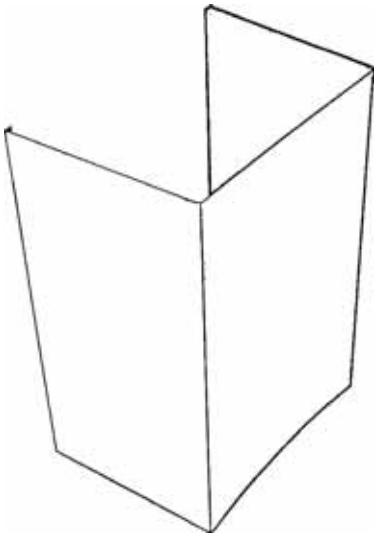


Range Hood
(vary with model)

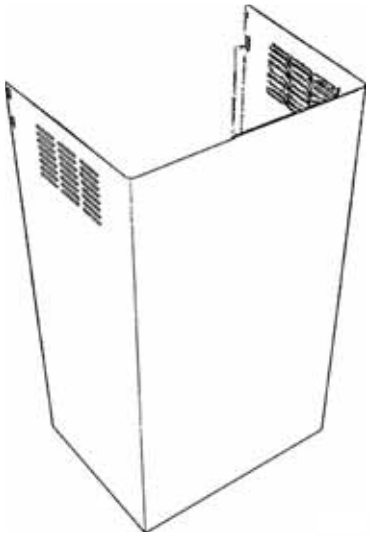




Flappers



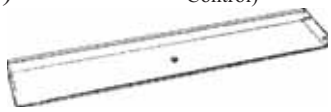
Lower standard chimney



Upper standard chimney

Aluminum Filter(s)

Remote Control
(Optional w/ "R" Class Control)



Mounting Bracket
(Not supplied with re-circulating kit)

Flexible Duct Tube

Air diverter
(Optional re-circulating kit)

Charcoal Filter
(Optional re-circulating kit)

Description	Quantity
Toggle Bolts	2 Pcs
Duct Set	1 Set
Body Hook	2 Pcs
Chimney Mounting Bracket	1 Pcs
This Guide and Warranty Card	1 Set
5mm x 16mm Screw with Washer	4 Set
4mm x 16mm Tapping Screw	6 Pcs
4mm x 10mm Tapping Screw	16 Pcs
Optional: Toggle Bolt with Tapping Screw for Air Diverter	2 Set
Optional: Screw for Charcoal Filter	3 Pcs

Venting Requirements

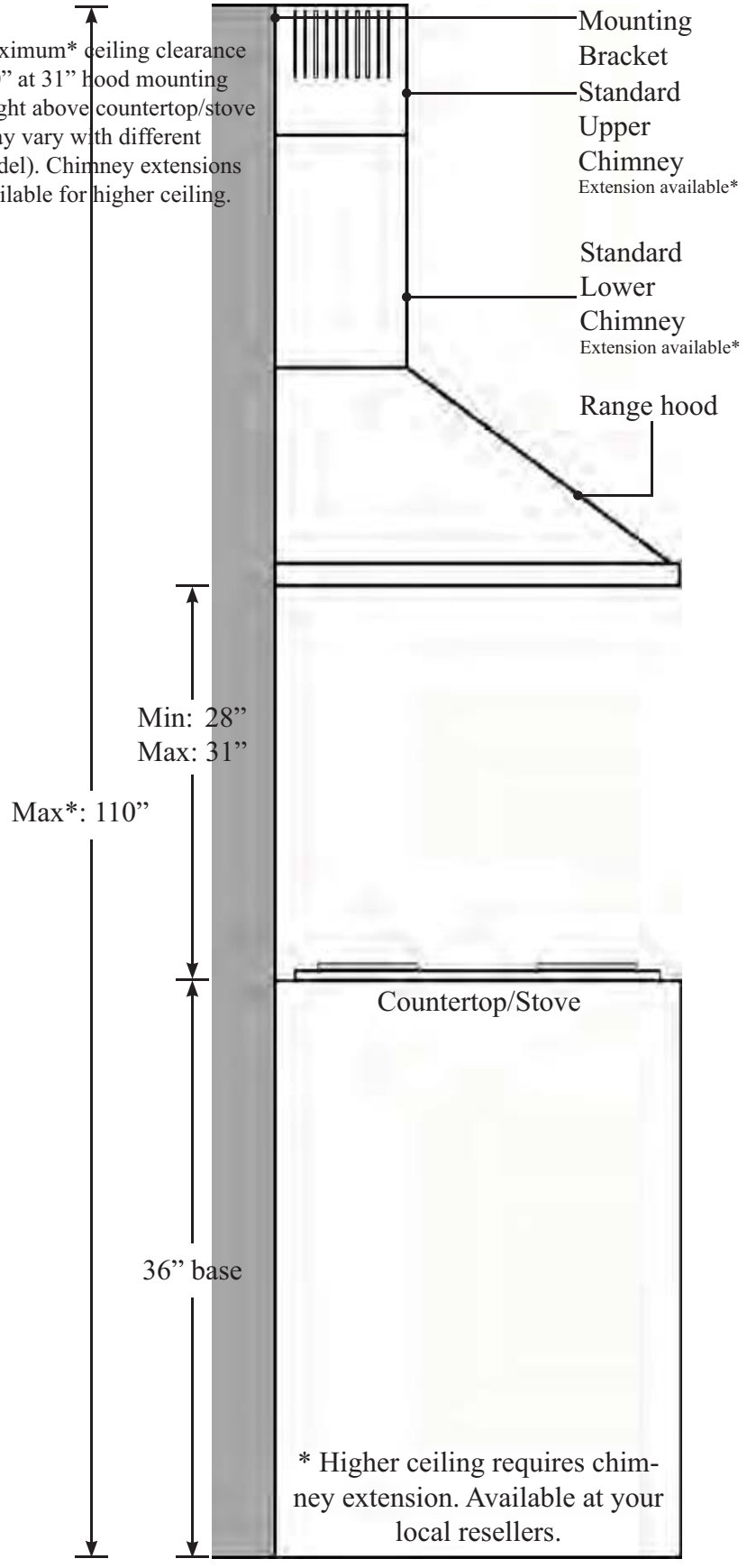
- Vent system must terminate to the outside (roof or side wall).
- DO NOT terminate the vent system in an attic or other enclosed area.
- DO NOT use 4” (10.2 cm) laundry-type wall caps.
- Use metal/aluminum vent only. Rigid metal/aluminum vent is recommended.
- DO NOT use plastic vent.
- Always keep the duct clean to ensure proper airflow.
- Calculate the following figures before installation:
  1. *Distance from the floor to the ceiling.*
  2. *Distance between the floor to the countertop/stove (recommend* 28” to 31”).*
  3. *Distance between the countertop/stove to the range hood.*
  4. *Height of hood and duct cover.*

For the most efficient & quiet operation:

- A distance of 28” to 31” is recommended* between stove top and the bottom of range hood.
- It is recommended that the range hood be vented vertically through the roof through 6” (15.2 cm) or bigger round metal/aluminum vent work.
- The size of the vent should be uniform.
- Use no more than three 90° elbows.
- Make sure there is a minimum of 24” (61 cm) of straight vent between the elbows if more than one elbow is used.
- DO NOT install two elbows together.
- The length of vent system and number of elbows should be kept to a minimum to provide efficient performance.
- The vent system must have a damper. If roof or wall cap has a damper, DO NOT use damper (if supplied) on top of the range hood.
- Use silver tape or duct tape to seal all joints in the vent system.
- Use caulking to seal exterior wall or roof opening around the cap.

* Due to different ceiling height configurations, recommended height may not be applicable.

Height & Clearance


Maximum* ceiling clearance 110” at 31” hood mounting height above countertop/stove (may vary with different model). Chimney extensions available for higher ceiling.
Mounting Bracket
Standard Upper Chimney
Extension available*
Standard Lower Chimney
Extension available*
Range hood
Min: 28”
Max: 31”
Max*: 110”
Countertop/Stove
36” base
* Higher ceiling requires chimney extension. Available at your local resellers.

IMPORTANT:

- A minimum of 6” round (standard for this range hood) or 3-1/4 x 10” rectangular duct (purchased separately) must be used to maintain maximum airflow efficiency.
- Flexible 6” round duct provided for convenience, always use rigid type metal/aluminum ducts if available to maximize airflow when connecting to provided duct.
- Please use *Duct Run Calculation* below to compute the total available duct run when using elbows, transitions and caps.
- ALWAYS, when possible, reduce the number or transitions and turns. If long duct run is required, increase duct size from 6” to 7” or 8”. If a reducer is used, install a long reducer instead of a pancake reducer. Reducing duct size will restrict airflow and decrease airflow, thus reduce duct size as far away from opening as possible.
- If turns or transitions are required: Install as far away from opening and as far apart, between 2, as possible.
- Minimum mount height between stove top to hood bottom should be no less than 28-inch*.
- Maximum mount height between stove top to hood bottom should be no higher than 31-inch*.
- It is important to install the hood at the proper mounting height. Hoods mounted too low could result in heat damage and fire hazard; while hoods mounted too high will be hard to reach and will loose its performance and efficiency.
- If available, also refer to stove top manufacturer’s height clearance requirements and recommended hood mounting height above range.

  * Due to different ceiling height configurations, recommended height may not be applicable.

Minimum Duct Size:

- Round - 6” minimum
- Rectangular - 3-1/4 x 10” minimum (requires a 6” to 3-1/4x10” adaptor, not supplied)

Calculating Vent System Length

To calculate the length of the system you need, deduct the equivalent feet for each vent piece used in the system from the recommended maximum duct run.

Duct Run Calculation:	
	Recommended maximum run
6” or 3-1/4 x 10” duct	50 ft
	Vent piece deduction
Each 90º elbow used	9 ft
Each 45º elbow used	5 ft
Each 6” to 3/14 x 10” transition used	7 ft
Side wall cap with damper	0 ft
Roof cap	0 ft

Duct Run Calcuation example:

One roof cap, two 90º elbow, and one 45º elbow used:

0ft + 9ft + 9ft + 5ft = 23ft used.

Deduct 23ft from 50ft, 27ft maximum available for straight duct run.

Venting Methods

- This range hood is factory set for venting through the roof or wall. For non-vented (re-circulating) installations, see ***Recirculating (Non-Vented) Kit*** on Page 11.
- Vent work can terminate either through the roof or wall. To vent through a wall, a 90° elbow is needed.

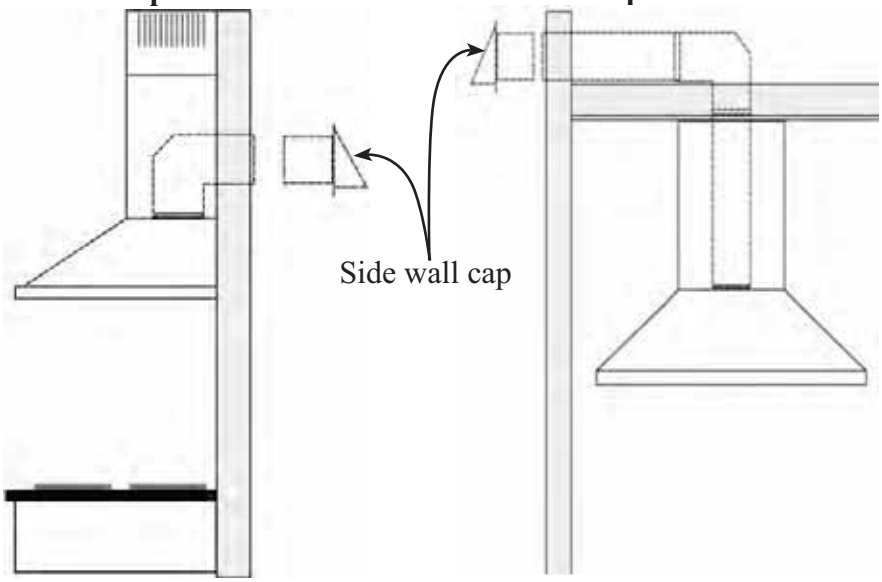
IMPORTANT:

- NEVER exhaust air or terminate duct work into spaces between walls, crawl spaces, ceiling, attics or garages. All exhaust must be ducted to the outside.
- Use metal/aluminum duct work only.
- Fasten all connections with sheet metal screws and tape all joints with certified Silver Tape or Duct Tape.
- Use caulking to seal exterior wall or roof opening around the cap.

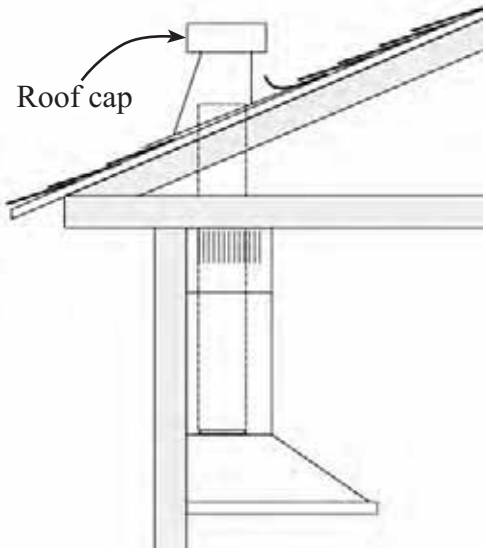
Horizontal wall venting

Option 1:

Option 2:



Vertical roof venting



Ductless Conversion

- Ductless conversion is intended for applications where an exhaust duct work is not possible to be installed. When converted, the hood functions as a purifying hood rather than an exhaust hood. Fumes and exhaust from cooking is drawn and filtered by a set of charcoal filters. The air is then purified and re-circulated back within the home.
- We recommend to ALWAYS exhaust air outside of the home by employing existing or installing new duct work, if possible. Only when the exhaust option is not possible should you recourse to converting the hood into a purifying unit.
- When converted to be a “purifying” unit, a set of charcoal filters and an air-diverter are required in addition to its standard aluminum filter set. Available at your local resellers. The standard aluminum filters are intended to capture residue from cooking, the optional charcoal filters help to purify fumes exhausted from cooking, and the optional air-diverter redirects filtered clean air back to the house.

Charcoal Filter Installation

NOTE: The charcoal filters are preinstalled if you purchased the range hood with re-circulating kit from us.

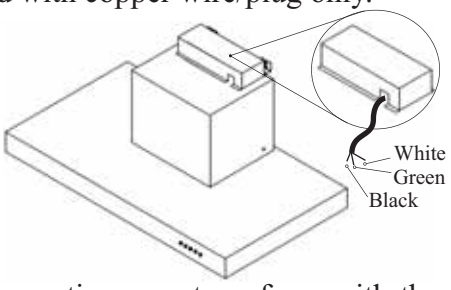
1. Remove aluminum filters on hood.
2. Remove the safety filter under the aluminum filter by unscrewing two screws, then position the charcoal filter and align the screw holes, reinstall and fasten two screws.
3. Reinstall the aluminum filters back to the hood.
4. Charcoal filters must be replaced after 120 hours of use (or approximately every 2 to 3 months based on the average of 1 to 2 hours of daily cooking time). Available at your local reseller.

Electrical Requirements

IMPORTANT: Observe all governing codes and ordinances.
(Please consult with a qualified electrician for 220-Volt 50 Hz voltage)

It is the customer's responsibility:
To contact a qualified electrical installer.
To assure that the electrical installation is adequate and in conformance with National Electrical Code, ANSI/ NFPA 70 — latest edition*, or CSA Standards C22. 1-94, Canadian Electrical Code, Part 1 and C22. 2 No. 0-M91 - latest edition** and all local codes and ordinances.

- If codes permit and a separate ground wire is used, it is recommended that a qualified electrician determine that the ground path is adequate.
- A 120-volt, 60 Hz, AC-only, fused electrical supply is required on a separate 15-amp circuit, fused on both sides of the line.
- Do not ground to a gas pipe.
- Do not have a fuse in the neutral or ground circuit.
- RISK OF ELECTRICAL SHOCK. This range hood must be properly grounded. Check with a qualified electrician if you are not sure whether the range hood is properly grounded.
- The range hood should be connected directly to the fused disconnect (or circuit breaker) box through flexible armored or non-metallic sheathed copper cable. A U.L. - or C.S.A. - listed strain relief must be provided at each end of the power supply cable. Do not use extension cord or adapter plug with this appliance.
- The range hood must be connected with copper wire/plug only.
- Always use plug provided. If not possible, connect three wires according to its color (black to hot, white to neutral, and green to ground) to house wires and cap with wire connectors:



WARNING
Hazard of electrical shock!
Do not perform service on an electrically live system. Disconnect the main electrical supply before servicing this device. Touching electrical connectors or other exposed electrical circuitry inside this range hood when they are energized could result in death, serious bodily injury, or property damage.

Wire sizes (copper wire only) and connections must conform with the rating of the appliance as specified on the model/serial rating label. Wire sizes must conform to the requirements of the National Electrical Code ANSI/NFPA 70 — latest edition*, or CSA Standards C22. 1-94, Canadian Electrical Code Part 1 and C22. 2 No. 0-M91 - latest edition** and all local codes and ordinances. A U.L. - or C.S.A. - listed conduit connector must be provided at each end of the power supply cable (at the range hood and at the junction box).

Copies of the standards listed may be obtained from:

* National Fire Protection Association
Batterymarch Park
Quincy, Massachusetts 02269

** CSA International
8501 East Pleasant Valley Road
Cleveland, Ohio 44131-5575

Preparation

WARNING

Excessive Weight

Require three or more person to move and install this range hood. Spinal or other bodily injuries could occur if it is not followed.

Advanced Preparations:

1. Read the entire installation guide and users manual thoroughly, understand instructions and warnings.
2. Be familiar with the controls of the range hood by reading through ***Range Hood Operations***, Page 13.
3. Place the range hood on a flat, stable surface. Connect the range hood to a designated standard outlet (please refer the product label for the suitable voltage of this unit) and verify no debris has entered the vent openings, then turn on the range hood. Verify all operations of the range hood by referring to ***Range Hood Operations***, Page 13.
4. Place all supplied parts and required hardware on a flat, stable surface and verify the existence of all supplied parts listed on Page 5.
5. Carefully remove the white plastic protective coat from the chimney covers and range hood.

Preparations:

NOTE: To avoid damage to your hood, prevent debris from entering the vent opening.

1. Determine and mark the center line on the ceiling where the range hood will be installed. Make sure there is proper clearance within the ceiling or wall for exhaust vent.
2. Due to the weight and size of this unit, please make sure that the support system or framework being used is stable and secure in the ceiling.
3. Put a thick, protective covering over counter top, cook top or range to protect from damage or dirt. Remove any hazardous objects around the area when installing.
4. Mark the locations of the support mounting bracket holes, vent cutout (if used) and power supply cable cutout on the ceiling. Use drill and saber saw or keyhole saw to cut openings for power supply cable and vent (see ***Venting requirements*** and ***Electrical requirements***, Pages 6-9).
5. If venting to the outside install vent system (see ***Venting Requirements***, Page 3). Use caulking to seal exterior wall or roof openings.
6. Disconnect main electrical supply, prepare and run electrical wiring through ceiling. Leave approximately 12” of electrical cord hanging from the ceiling. Do not restore power until wiring is completed.
7. Disconnect power cord, remove the aluminum filter by pressing on the latch and gently pull the aluminum filter down.
8. If charcoal filter is present, unscrew the two screws and remove the filter.
9. Set aside the aluminum filters and charcoal filter until the range hood is properly installed.
10. *If the range hood comes with a glass canopy and has not already been mounted to the hood, loosen the four canopy screws and washers from the hood top, carefully place the canopy on the hood top, and loosely tighten the four canopy screws along with washers. DO NOT put excessive pressure against the glass.*

WARNING

Severe Injury

Rotating fan can cause severe injury. Stay clear of fan when motor is running.

WARNING

Severe Injury

Hood may have very shape edges. Please wear protective gloves if it is necessary to remove any parts for installing, cleaning or servicing.

Installation

Installations (refer to Page 4 for parts)**:**

Due to excessive weight, two or more person is recommended for this step.

WARNING

Excessive Weight

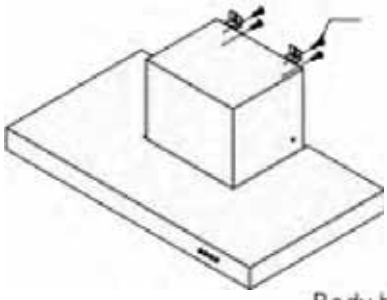
Require three or more person to move and install this range hood. Spinal or other bodily injuries could occur if it is not followed.

1. Locate an optimal location to place the range hood. Mark the leveling points for two Body Hooks (Figure 1) on the wall and drill two holes with diameter not exceeding 5/8". Insert two toggle bolts then fasten two 4mm x 16mm Tapping Screws, reserve approximately 1/8" for the body hooks. Be sure to use appropriate anchors for your wall.

If Recirculating (Non-Vented) Kit is purchased, please skip this step and proceed to Page 11.

2. Find an optimal location for the Chimney Mounting Bracket. The chimney mounting bracket ***must be placed directly*** above and align with the two body hooks, see Figure 2. Drill two more holes with diameter not exceeding 5/8" and insert two toggle bolts. Secure the chimney mounting bracket with two 4mm x 16mm Tapping Screws as shown in Figure 2. Be sure to use appropriate anchors for your wall. Use four sets of 5mm x 16mm Screw with Washer to install the body hooks onto the hood. Then hang the hood on the wall and tighten the screws. **CAUTION: MAKE SURE the range hood is secure before releasing!**

Figure 1



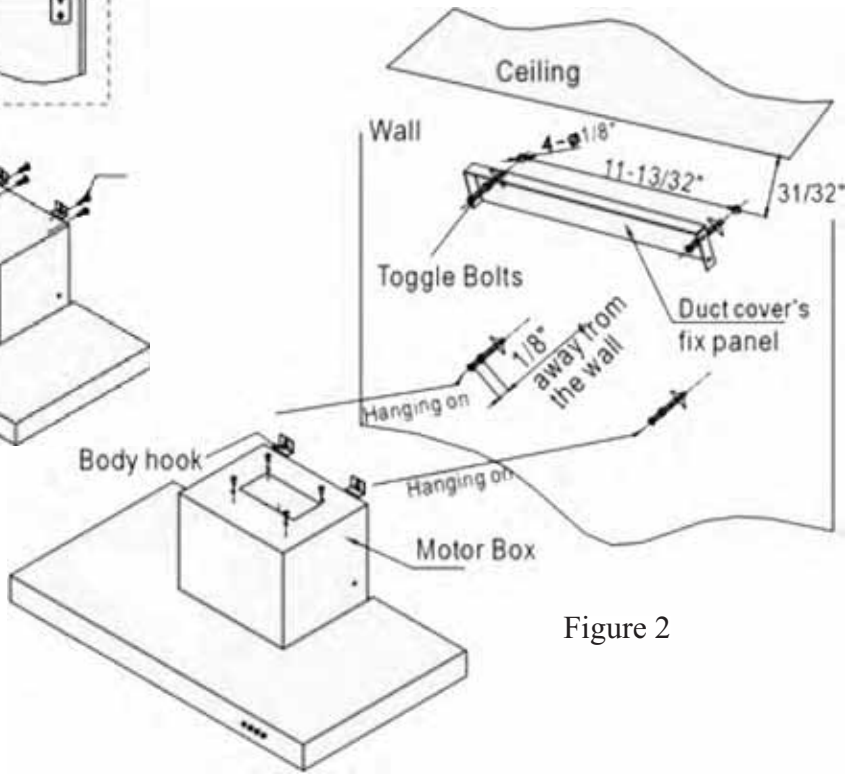
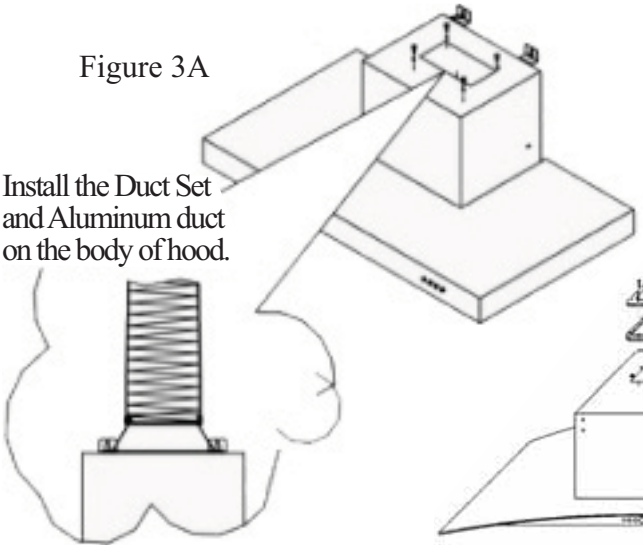


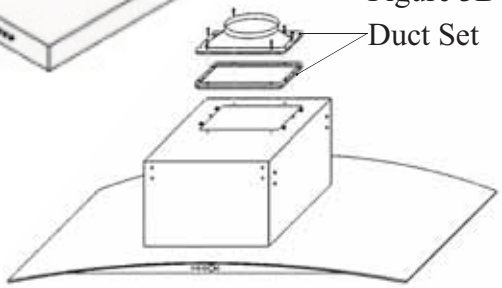
Figure 2

Figure 3A



3. Install the Duct Set using six 4mm x 16mm Tapping Screws, then install Aluminum Duct Tube as shown in Figure 3A and 3B. Proceed to step 6 on Page 12.

Figure 3B



WARNING
Hazard of electrical shock!
Do not perform service on an electrically live system. Disconnect the main electrical supply before servicing this device. Touching electrical connectors or other exposed electrical circuitry inside this range hood when they are energized could result in death, serious bodily injury, or property damage.

Installation (Continued)

If Recirculating (Non-Vented) Kit is NOT purchased, please go back to step 2 on Page 10.

4. Find an optimal location for the Air Diverter. The air diverter ***must be placed directly*** above and align with the two body hooks, see Figure 4. Drill four more holes with diameter not exceeding 5/8" and insert four toggle bolts. Secure the air diverter with four 4mm x 16mm Tapping Screws as shown in Figure 4. Be sure to use appropriate anchors for your wall. Use four sets of 5mm x 16mm Screw with Washer to install the body hooks onto the hood. Then hang the hood on the wall and tighten the screws. **CAUTION: MAKE SURE the range hood is secure before releasing!**

WARNING

Excessive Weight

Require three or more person to move and install this range hood. Spinal or other bodily injuries could occur if it is not followed.

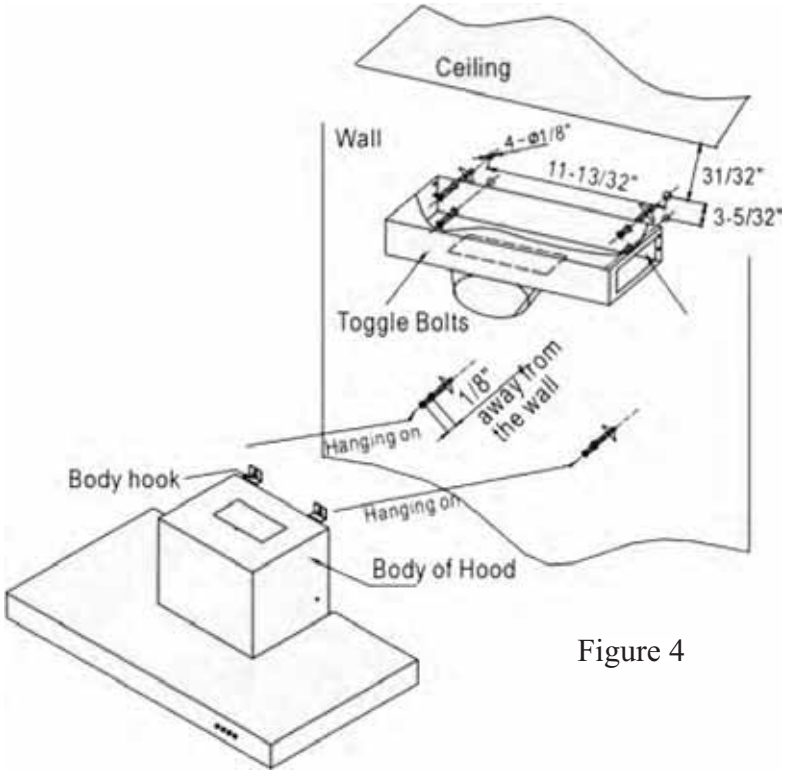
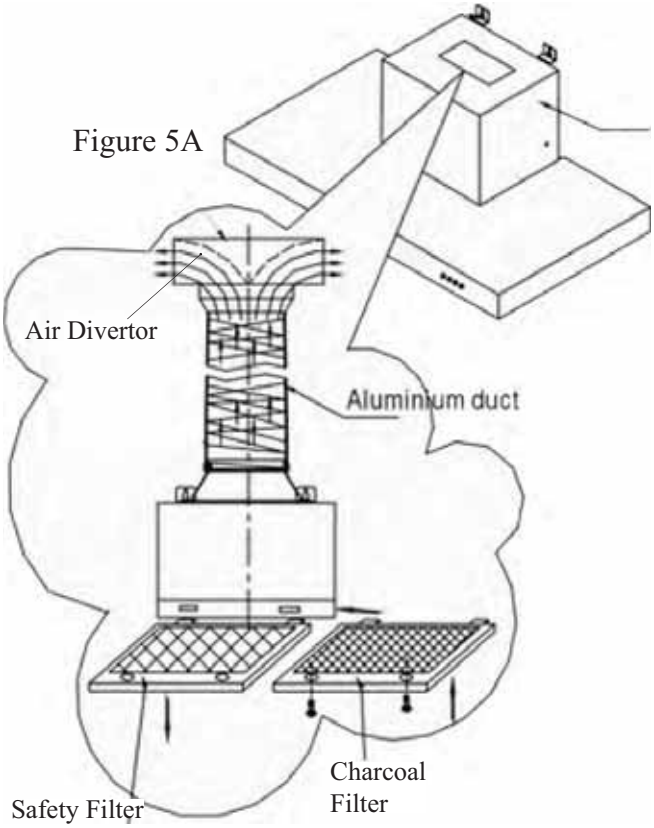


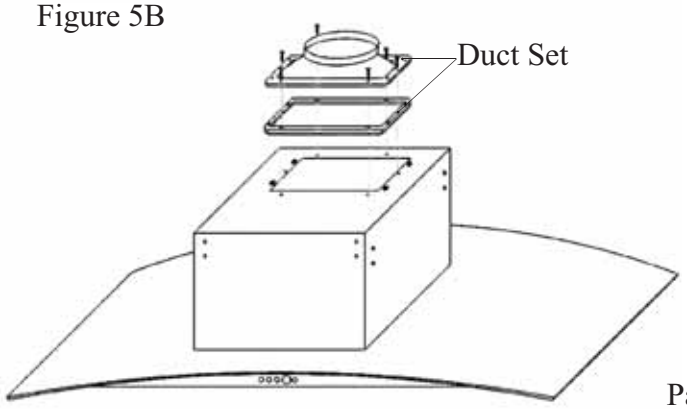
Figure 4

Figure 5A



5. Install Aluminum Duct Tube as shown in Figure 5A. Installation of charcoal filter during this step is also recommended, please see *Charcoal Filter Installation* on Page 8.

Figure 5B



Installation (Continued)

6. Connect the duct tube to the exterior exhaust system or the optional air diverter. Make sure all joints are secure and air tight. Use of duct tape is recommended.
7. Place Upper Chimney and Lower Chimney over the body of the hood as shown in Figure 7A (or Figure 7B of air diverter is present). Slide up the upper duct cover towards the chimney mounting bracket or the optional air diverter. Use four 4mm x 10mm Tapping Screws to secure the upper chimney onto the chimney mounting bracket or the optional air diverter. Finally secure the lower chimney to the hood body by using two 4mm x 10mm Tapping Screws.

Figure 7A

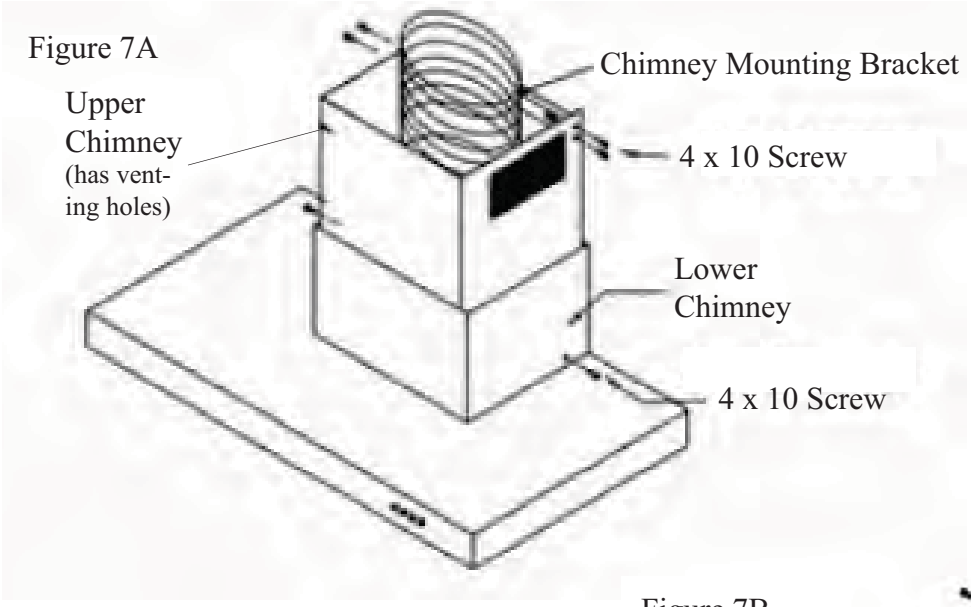
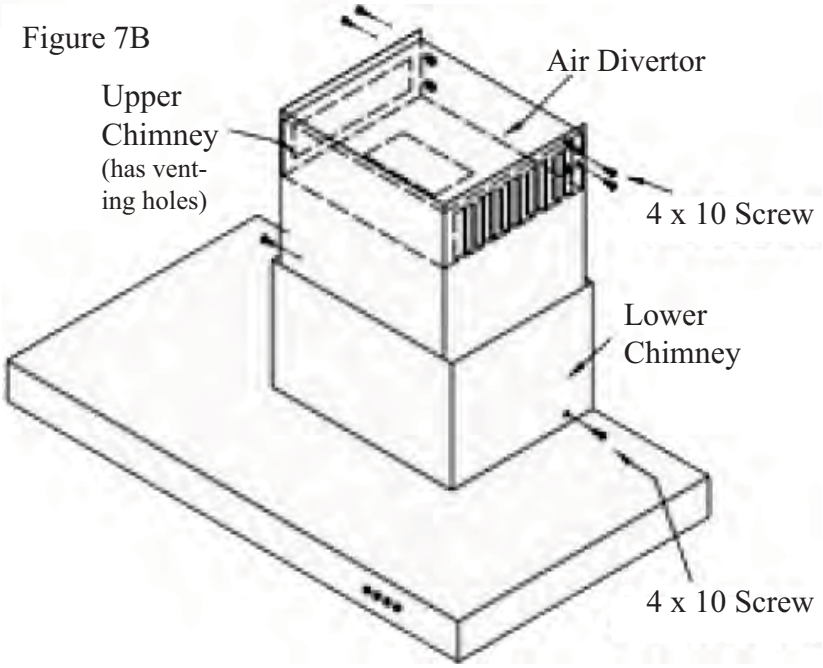


Figure 7B



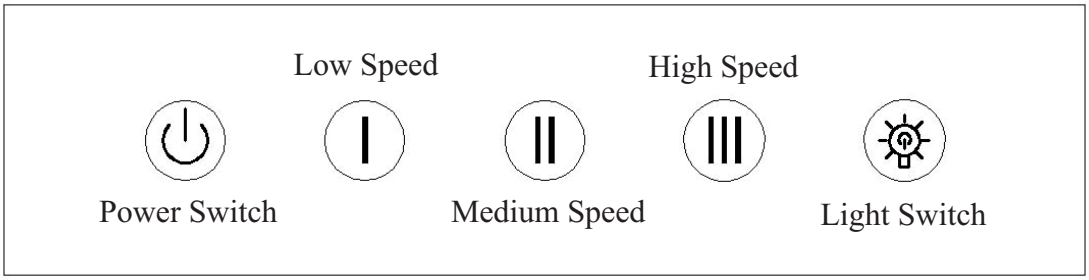
WARNING

Excessive Weight

Require three or more person to move and install this range hood. Spinal or other bodily injuries could occur if it is not followed.

Range Hood Operations & Wiring Diagram

SV168/198 Series Standard Class (3 Speed Mechanical Control)



Turn On:

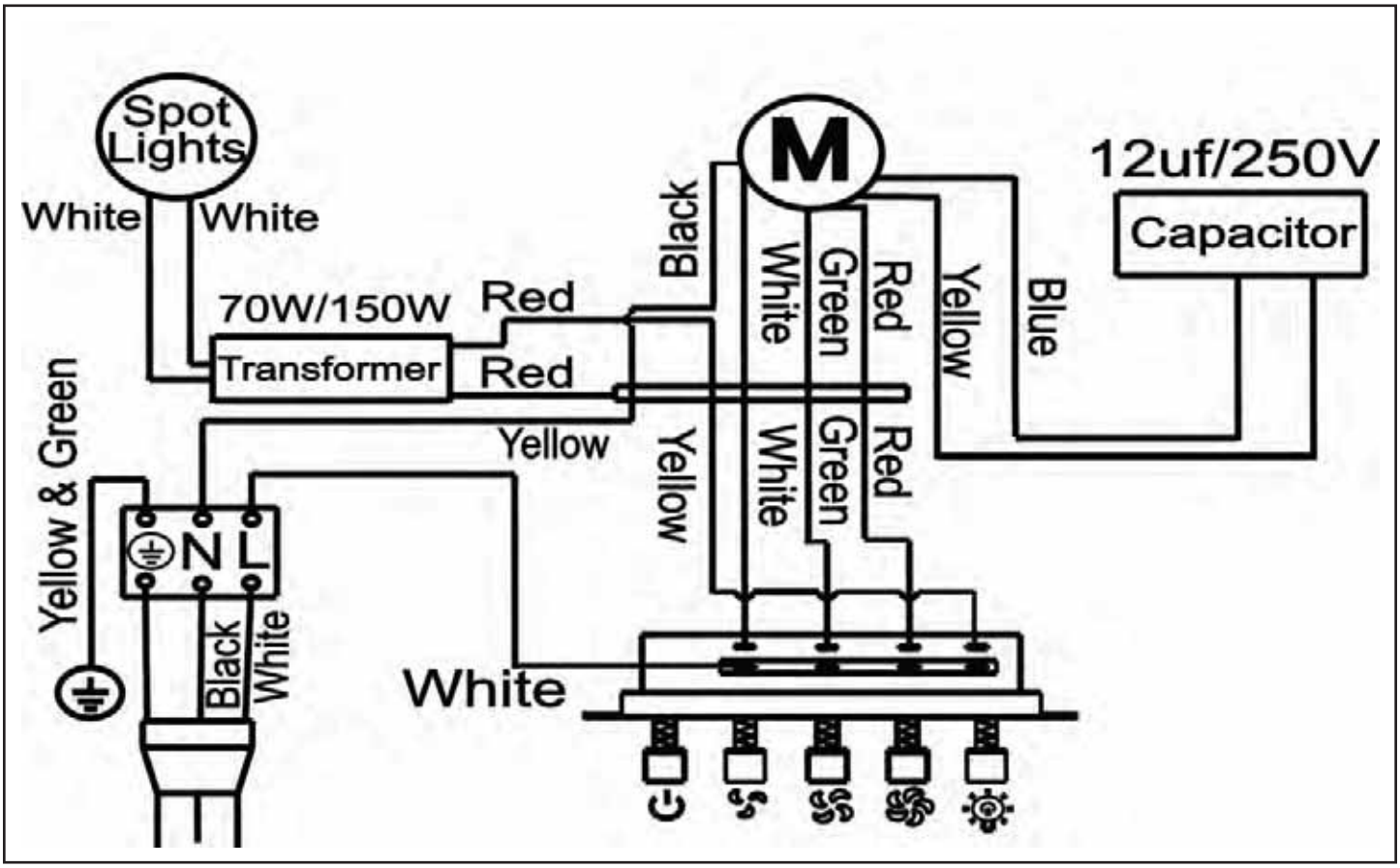
- Press the speed control (Low Speed, Medium Speed, High Speed) switch to select the desired level of power. Once button is pressed, the previous speed mode will cancel.
- Press the Light Switch to power on the lights.

CAUTION: DO NOT touch the lights until switched OFF and cooled.

Turn Off:

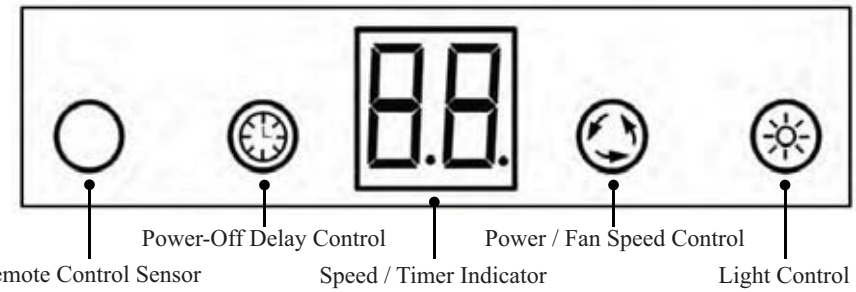
- Press the Power Switch to turn off the power.
- Press the Light Switch to power off the lights

SV168/198 Series Standard Class Wiring Diagram



Range Hood Operations & Wiring Diagram (Continued)

SV168/198 Series "R" Class (4 Speed Electronic Control w/ Remote)



This range hood is equipped with a credit card size remote control (approximately 20ft range), three built-in electronic controls, a powerful centrifugal squirrel cage motor, grease filters and two bright 12V 20W halogen lights.

The three built-in electronic buttons control the power of the Lights, Power-Off Delay and Fan Speeds: Quiet (F1), Low (F2), Medium (F3) and High (F4). The Power-Off Delay offers up to 99 minutes delay shutoff. The Light Control operates independently from the Power / Fan Speed Control but can be turned OFF the delay shutoff function.

Turning Fan ON using built-in electronic controls:
Always turn fan ON before cooking to establish air flow and allow fan to run for a few minutes after cooking for cleaner air in the kitchen.

- Press the Power / Fan Speed Control button once to activate the fan at Quite (F1) mode. The Speed / Timer Indicator will activate to indicate fan speed.
- To change the fan speed, press the Power / Fan Speed Control button. Each press will cycle through Quiet (F1), Low (F2), Medium (F3), High (F4) Speed and OFF (00). The Speed / Timer Indicator will change accordingly.

Turning Fan OFF using built-in electronic controls:
The Power-Off Delay function will turn OFF both fan and lights.

1 to 99 Minute Delay

- While the fan is operating, press Power-Off Delay Control button once, the Speed / Timer Indicator will display a 15-minute timer then flash for three seconds. While flashing, the timer can be adjusted by 1 minute increments, with the default set at 15 minutes, from as short as 1 minute to as long as 99 minutes. After the desired setting has been achieved, the Speed / Timer Indicator will return to fan speed mode and Power-Off Delay Control button will flash until power OFF after a few seconds. Changing speed does not affect the delay shutoff function.
- While the fan is OFF, press Power-Off Delay Control button once will turn ON the fan at Quiet (F1) mode with 15 minutes delay shut off activated.

Immediate Power-off

- While the fan is operating, press the Power / Fan Speed Control button one to four times until Speed / Timer Indicator shows "00" to turn OFF the fan immediately. NOTE: Power / Fan Speed Control will cycle through Quiet (F1), Low (F2), Medium (F3), High (F4) Speed and OFF (00).

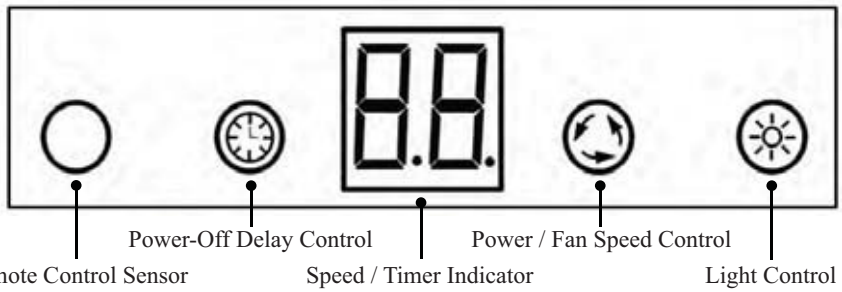
Light Control using built-in electronic controls:
Light Control button operates independently from the Power / Fan Speed but can be turned OFF by the Power-Off Delay function. Activating the delay function will turn halogen lights OFF.

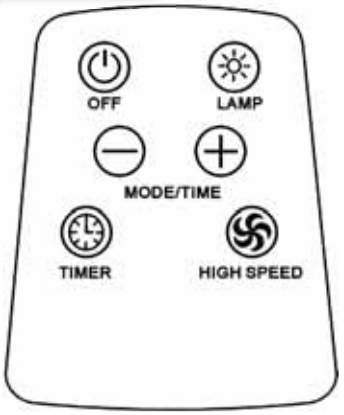
CAUTION: DO NOT touch the lights until switched OFF and cooled.

- While the halogen lights are OFF, press the Light Control button once to turn halogen lights ON. Light Control button will light up.
- Press the Light Control button again to turn OFF the lights.

Range Hood Operations & Wiring Diagram (Continued)

SV168/198 Series "R" Class (4 Speed Electronic Control w/ Remote)





The credit card size remote control controls the power of the Lights, Power-Off Delay, Power (ON/OFF) and Fan Speeds: Quiet (F1), Low (F2), Medium (F3) and High (F4). The Power-Off Delay offers up to 99 minutes delay shutoff. The Light Control operates independently from the Power / Fan Speed Control but can be turned OFF the delay shutoff function.

Turning Fan ON using remote control:
Always turn fan ON before cooking to establish air flow and allow fan to run for a few minutes after cooking for cleaner air in the kitchen.

- Press the ⊖ button once to activate the fan at Quite (F1) mode, once again to turn OFF the fan. The Speed / Timer Indicator will activate to indicate fan speed.
- While the fan is operating at Quite (F1) mode, press the ⊕ button to increase fan speed. Each press will go through Low (F2), Medium (F3), High (F4) Speed, then OFF (00). The Speed / Timer Indicator will change accordingly.
- Press the ⊕ button once to activate the fan at Medium (F3) Speed. Each press will cycle throught Medium (F3), High (F4) Speed and OFF (00).
- Press the button once to activate the fan at High (F4) Speed, once again to turn OFF the fan.

Turning Fan OFF using remote control:
The Power-Off Delay function will turn OFF both fan and lights.

1 to 99 Minute Delay

- While the fan is operating, press the button once, the Speed / Timer Indicator will display a 15-minute timer then flash for three seconds. While flashing, the timer can be adjusted by 1 minute increments by pressing ⊕ button and 1 minute decrements by pressing ⊖ button, with the default set at 15 minutes, from as short as 1 minute to as long as 99 minutes. After the desired setting has been achieved, the Speed / Timer Indicator will return to fan speed mode and Power-Off Delay Control button will flash until power OFF after a few seconds. Changing speed does not affect the delay shutoff function.
- While the fan is OFF, press button once will turn ON the fan at Quiet (F1) mode with 15 minutes delay shut off activated.

Immediate Power-off

- While the fan is operating, press the button once to turn OFF the fan immediately.

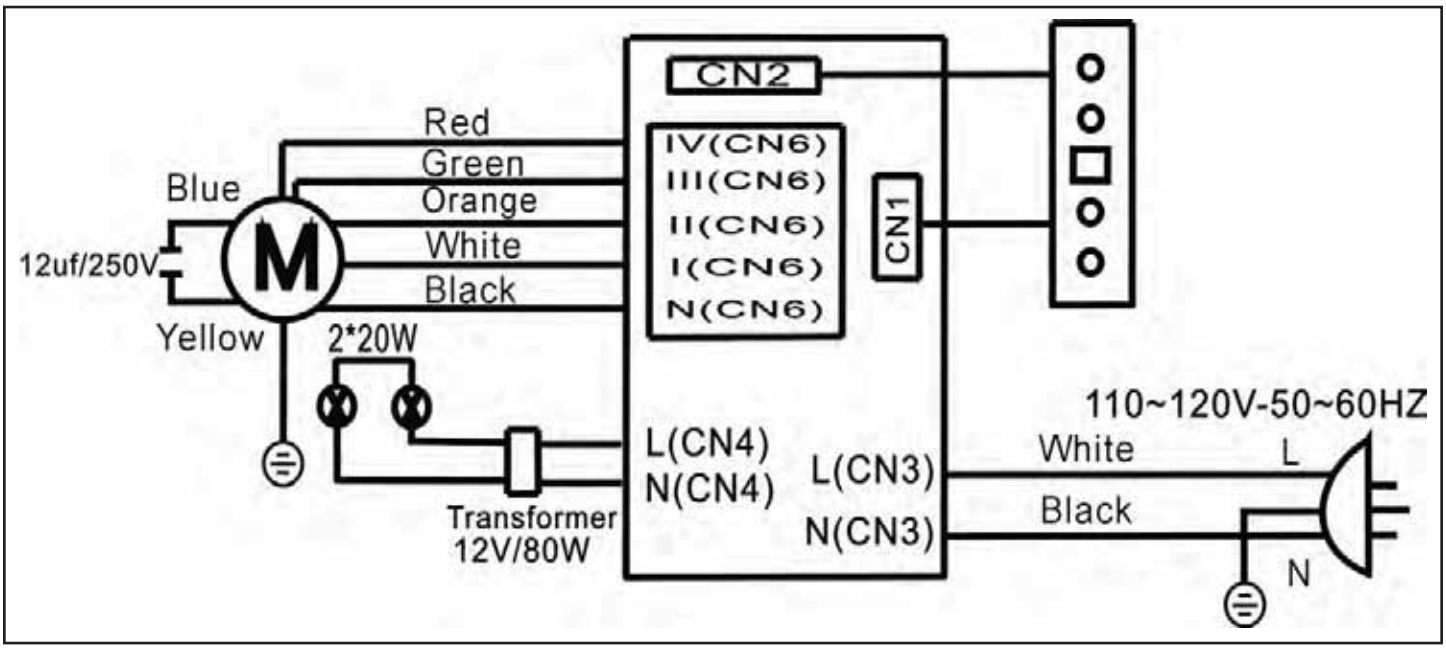
Light Control using remote control:
button operates independently from the ⊖, ⊕, buttons but can be turned OFF by the and function. Activating the delay function will turn halogen lights OFF.

CAUTION: DO NOT touch the lights until switched OFF and cooled.

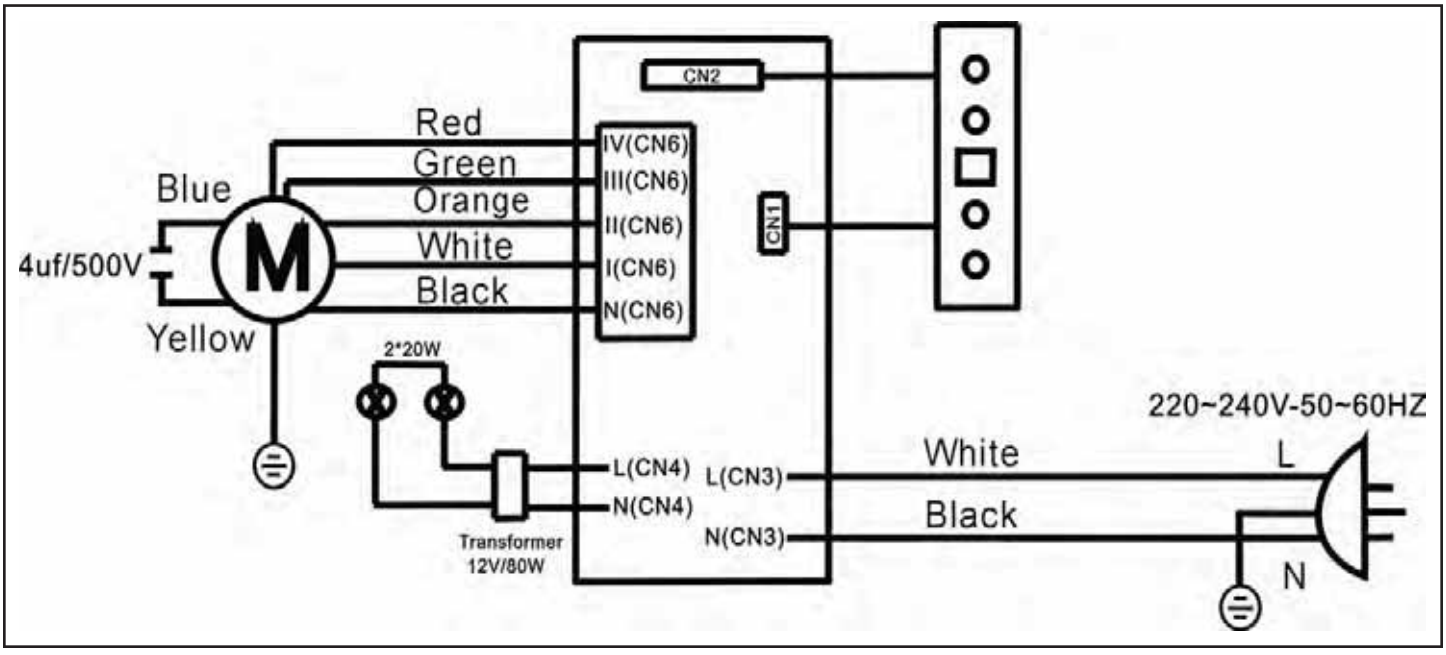
- While the halogen lights are OFF, press the button once to turn halogen lights ON. Light Control button will light up.
- Press the button again to turn OFF the lights.

Range Hood Operations & Wiring Diagram (Continued)

SV168 Series “R” Class Wiring Diagram

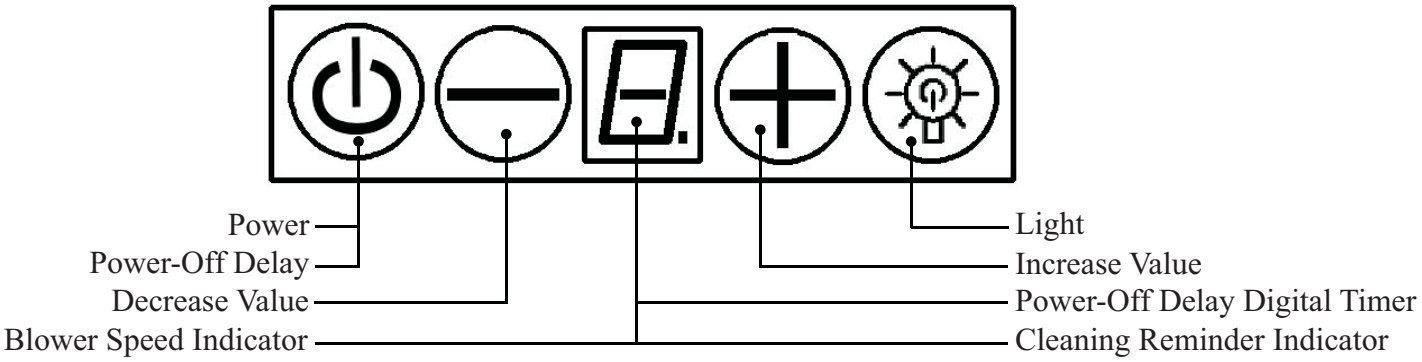


SV198 Series “R” Class Wiring Diagram



Range Hood Operations & Wiring Diagram (Continued)

SV168/198 Series "E" Class (4 or 6 Speed Electronic Touch Control)



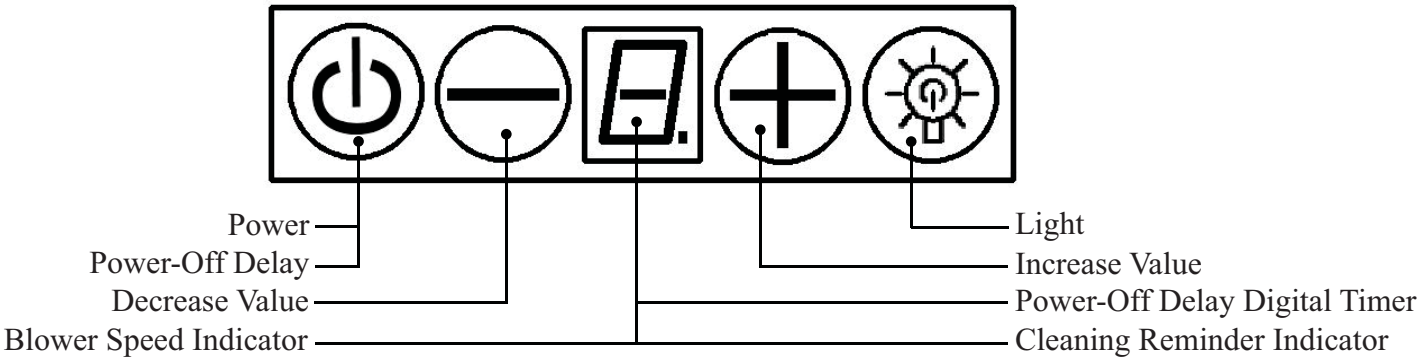
The range hood is designed to remove smoke, cooking vapors and odors from the cook top area. For best results, start the range hood before cooking and allow it to operate several minutes after the cooking incomplete to clear all smoke and odors from the kitchen.

- Button functions:
  - Power: Power ON/OFF and activate power-off delay timer.
  - Decrease Value: Blower (motor) speed decrease, timer value decrease, and enter timer mode.
  - Increase Value: Blower (motor) speed increase, timer value increase, and cleaning reminder reset.
  - Blower Speed Indicator: Shows current blower (motor) speed (1-4 or 1-6).
  - Light: Turns ON/OFF and dim halogen lights.
  - Power-Off Delay Digital Timer: Indicates the length of time left for delay off function.
- Controls:
  - Automatic cleaning reminder:
    - When blower (motor) starts to rotate, cumulative running time reached 30 hours then the *Cleaning Reminder Indicator* "C" flashes and reminds user to clean the aluminum filter.
    - After cleaning the filter and when the motor is not in use, press and hold *Increase Value* button over 3 seconds to reset the timer. Please note that turning off the system will not reset the *Power-On Elapsed Digital Timer*.
  - Adjusting the blower (motor) speed:
    - Press *Power* button once to turn on the system. The *Blower Speed Indicator* shows the blower (motor) speed level. *Decrease Value* button will decrease the speed of the blower (motor) from 4 or 6 to 1 (strongest to quietest). *Increase Value* button will increase the speed of the blower (motor) from 1 to 4 or 6 (quietest to strongest).
    - Press *Power* button once to turn off the system.

Note: The system saves user configurations, settings such as light, timer and blower (motor) speed will remain the same the next time it is turned on.

Range Hood Operations & Wiring Diagram (Continued)

SV168/198 Series “E” Class (4 or 6 Speed Electronic Touch Control)



- Controls:
  - Adjusting the timer function:
    - While the blower (motor) is not running, press and hold *Decrease Value* button over 3 seconds to enter timer mode. Adjust to desired period of delay off timer by pressing *Increase Value* or *Decrease Value* button (minimum 1 minute to maximum 9 minutes). This setting will be saved immediately.
  - Activating the timer function:
    - While the blower (motor) is running, press and hold *Power* button for over 3 seconds to activate delay off timer. *Power-Off Delay Digital Timer* begin to countdown, when it reaches zero, the blower (motor) will shut down.
  - Adjusting the light:
    - Press *Light* button once to turn on the lights, and once again to turn off the lights.
    - While the lights are off, press and hold *Light* button for over 3 seconds to dim the lights from high to low. Level of brightness will be stored in system’s memory.

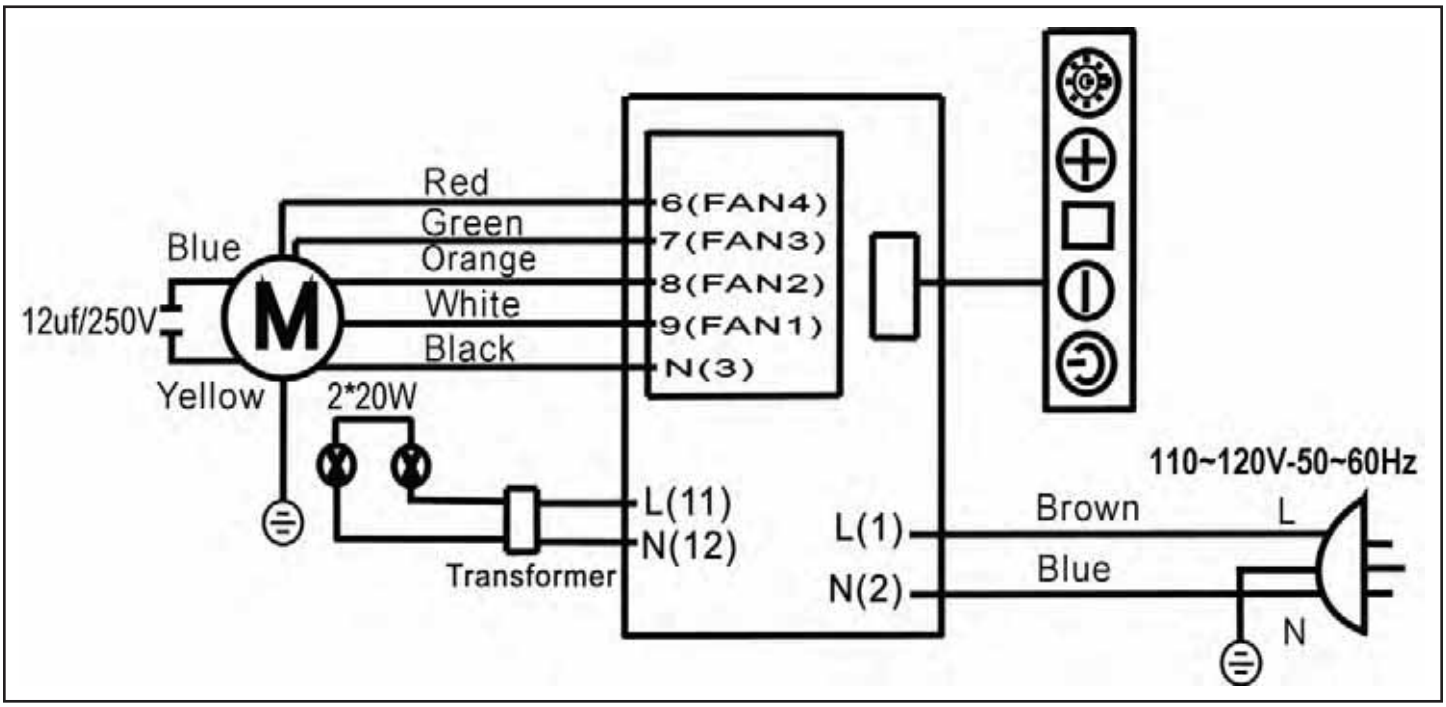
CAUTION: DO NOT touch the lights until switched OFF and cooled.

Note: Light settings are independent from other settings (including power-off delay) and lights has to be manually turned on or off.

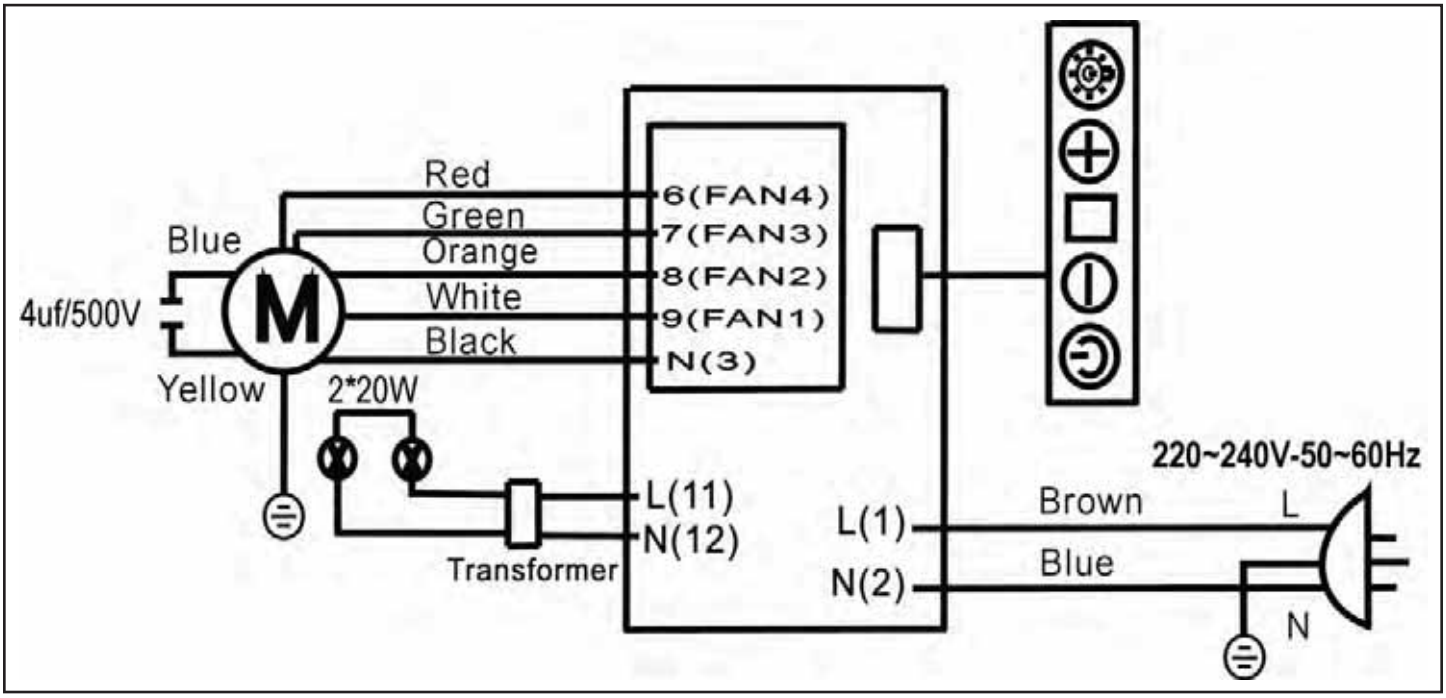
Note: The system saves user configurations, settings such as light, timer and blower (motor) speed will remain the same the next time it is turned on.

Range Hood Operations & Wiring Diagram (Continued)

SV168 Series “E” Class Wiring Diagram (4 Speed)

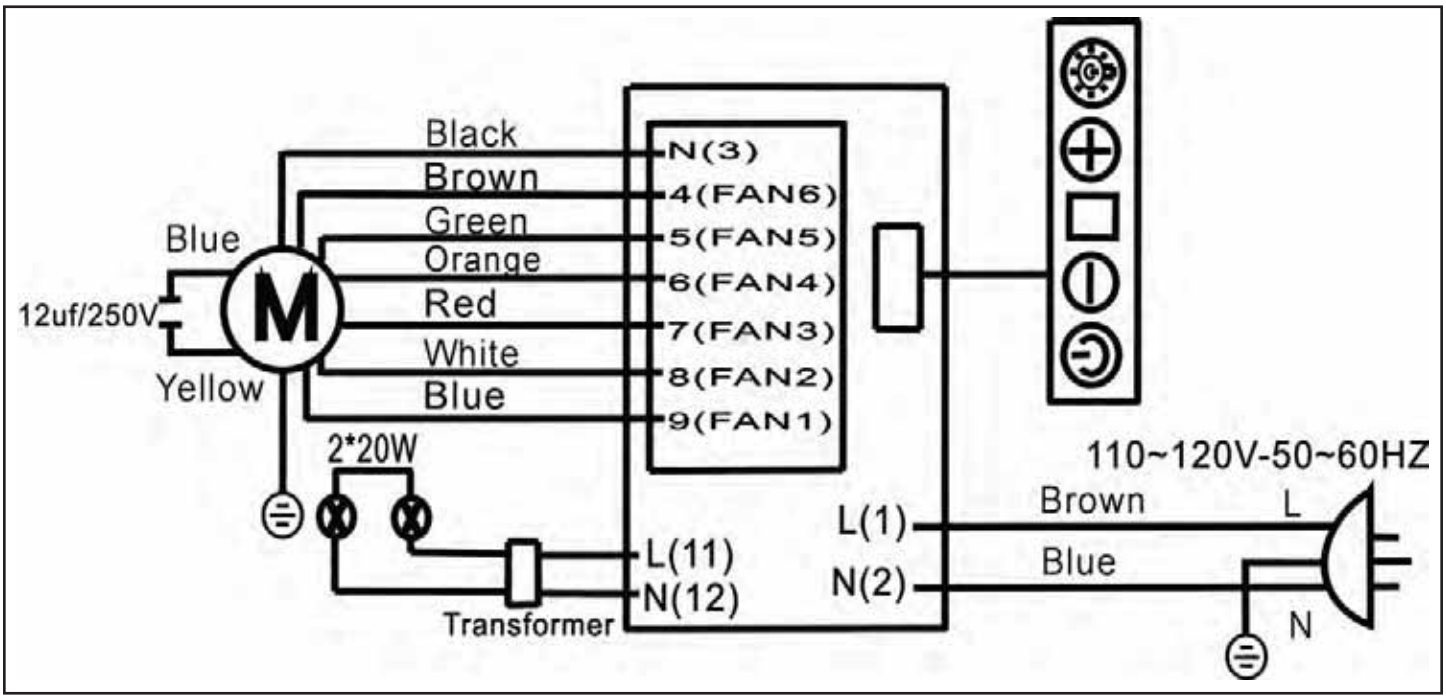


SV198 Series “E” Class Wiring Diagram (4 Speed)

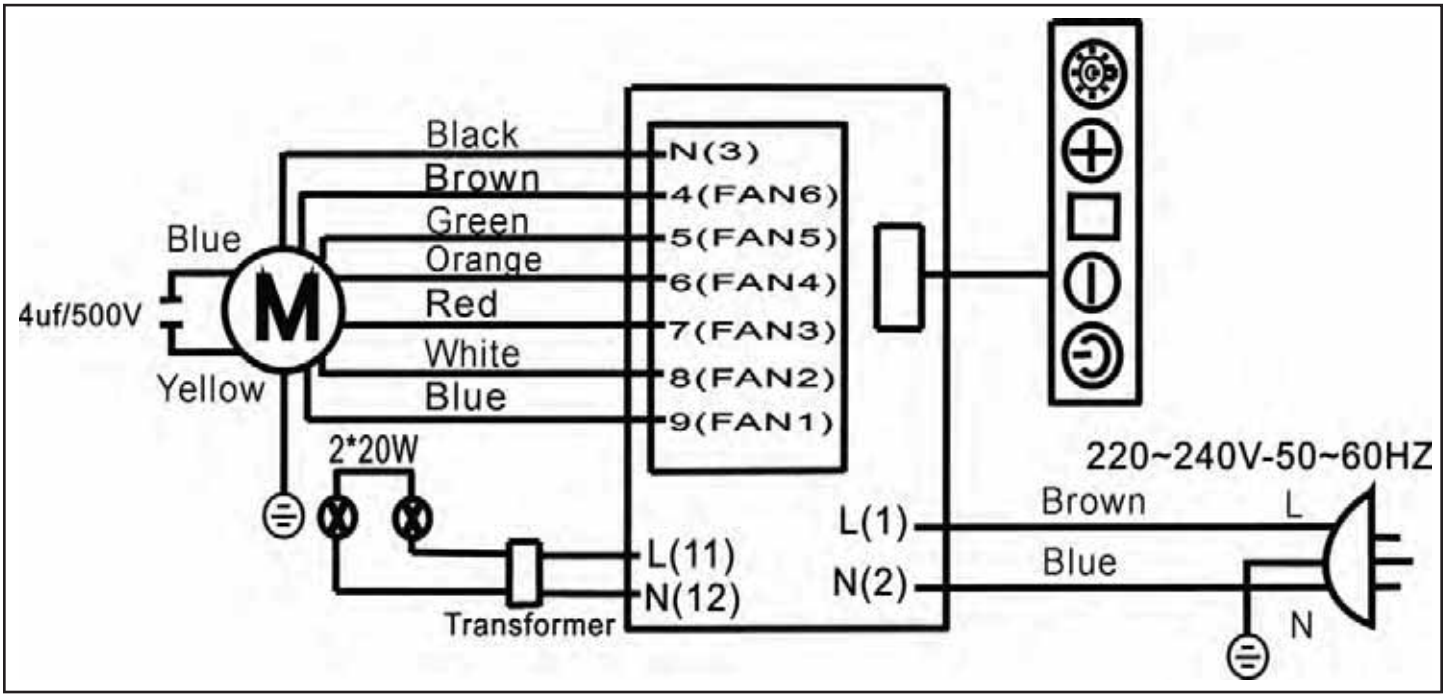


Range Hood Operations & Wiring Diagram (Continued)

SV168 Series “E” Class Wiring Diagram (6 Speed)



SV198 Series “E” Class Wiring Diagram (6 Speed)



Troubleshooting

WARNING
Hazard of electrical shock!
Do not perform service on an electrically live system. Disconnect the main electrical supply before servicing this device. Touching electrical connectors or other exposed electrical circuitry inside this range hood when they are energized could result in death, serious bodily injury, or property damage.

1. If the range hood or halogen light does not operate after installation:
   - Check if the range hood has been plugged in, make sure that all power has been turned back ON, fused not blown and all electrical wiring are properly connected.
   - Swap out light assembly to working ones to determine whether it is caused by defective bulbs. See *Replacing the light bulbs* on Page 22.
2. The range hood vibrates when the blower is on:
   - The range hood might not have been secured properly on to the ceiling or wall. Check with your installer
3. The blower or fan seems weak:
   - Check that the duct sized used is at least 6” or 3-1/4 x 10”. Range hood WILL NOT function efficiently with insufficient duct size. For example: 8” duct over 6” hole and loosely secured.
   - Check if duct is clogged or if damper unit (half-circular flapper) is not installed correctly or opening properly. A tight mesh on a side wall cap unit might also cause restriction to the air flow.
4. The lights work but the blower is not spinning at all, is stuck or is rattling.
   - The blower might be jammed or scraping the bottom due to shipping damage. Please contact us immediately.
5. The hood is not venting out properly:
   - Make sure the distance between the stove top and the bottom of the hood is within* 28” and 31” in distance. **Due to different ceiling height configurations, recommended height may not be applicable*.
   - Reduce the number of elbows and length of duct work. Check if all joints are properly connected, sealed, and taped.
   - Make sure the power is on high speed for heavy cooking.
6. Purpose of the slots/holes/openings near the top of the upper chimney:
   - These slots/holes/openings are used to exhaust cleaned air with optional re-circulating kit. If you did not install one, you do not need them.

NOTE: *For all other inquiries, please contact your local reseller.*

Use and Care Information

Operations:

- Read and understand all instructions and warnings in this manual before operating the appliance. Save these instructions for future reference.
- Always leave safety grills and filters in place. Without these components, operating blowers could catch on to hair, fingers and loose clothing.
- NEVER dispose cigarette ashes, ignitable substances, or any foreign objects into blowers.
- NEVER leave cooking unattended. When frying, oil in the pan can easily overheat and catch fire. The risk of self combustion is higher when the oil has been used several times.
- NEVER cook on "open" flames under the range hood. Check deep-fryers during use: Superheated oil may be flammable.

Cleaning:

- The saturation of greasy residue in the blower and filters may cause increased inflammability. Keep unit clean and free of grease and residue build-up at all times to prevent possible fires.
- Filters must be cleaned periodically and free from accumulation of cooking residue (see *cleaning instructions* on Page 18). Old and worn filters must be replaced immediately.
- Do not operate blowers when filters are removed. Never disassemble parts to clean without proper instructions. Disassembly is recommended to be performed by qualified personnel only. Read and understand all instructions and warnings in this manual before proceeding.

Specifications

Specifications*:	
Body	Stainless Steel / Tempered Glass
Power Rating	220V/50Hz or 120V/60Hz (USA & Canada standard)
General Input Power	200 W (160W + 2x20W)
Motor Input Power	160 W
Motor Revolution	800 RPM (±10%) to 1300 RPM (±10%)
Levels Of Speed Control	3 / 4 / 6 Levels
Maximum Airflow	860 CFM
Air Pressure	150 Pa (200 Pa Maximum)
Noise Level (dB / sone)	Approximately 35 / 0.7 to 67 / 6.5 (Lowest to highest Speed)
Motor Type	Single Chamber Ultra Quiet
Fan Type	Centrifugal / Sirocco
Control Type	3 Spd Mechinical / 4 Spd Elec. + Remote / 4 or 6 Spd Elec. Touch
Filtration Type	Aluminum Filter
Illumination	20W 12V Maximum
Venting Size	Top, 6 inches Round
Interference Protection	Radio Frequency Interference Protected

* Subject to change without notice, please contact your local reseller for details.

Maintenance

SAFETY WARNING: Never put your hand into area housing the fan while the fan is operating!

For optimal operation, clean range hood and all baffle/spacer/filter/grease tunnel/oil container regularly. Regular care will help preserve the appearance of the range hood.

Cleaning Exterior surfaces:

- Clean periodically with hot soapy water and clean cotton cloth. Do not use corrosive or abrasive detergent (e.g. Comet Power Scruv®, EZ-Off® oven cleaner), or steel wool/scoring pads, which will scratch and damage the stainless steel surface. For heavier soil use liquid degrease such as "Forumla 409®" or "Fantastic®" brand cleaner.
- If hood looks splotchy (stainless steel hood), use a stainless steel cleaner to clean the surface of the hood. Avoid getting cleaning solution onto or into the control panel. Follow directions of the stainless steel cleaner. **CAUTION: Do not leave on too long as this may cause damage to hood finish.** Use soft towel to wipe off the cleaning solution, gently rub off any stubborn spots. Use dry soft towel to dry the hood.
- After cleaning, you may use non abrasive stainless steel polish such as 3M® or ZEP®, to polish and buff out the stainless luster and grain. Always scrub lightly, with clean cotton cloth, and with the grain.
- DO NOT allow deposits to accumulate or remain on the hood.
- DO NOT use ordinary steel wool or steel brushes. Small bits of steel may adhere to the surface and cause rusting.
- DO NOT allow salt solutions, disinfectants, bleaches, or cleaning compounds to remain in contact with stainless steel for extended periods. Many of these compounds contain chemicals, which may be harmful. Rinse with water after exposure and wipe dry with a clean cloth.

Cleaning Aluminum Grease Filter / Stainless Steel Filterless Grill:

IMPORTANT: Drain oil from oil containers before oil and residue overflow!

- The metal filters fitted by the factory are intended to filter out residue and grease from cooking. It need not be replaced on a regular basis but are required to be kept clean.
- Filters should be cleaned after every 30 hours of use.
- Remove and clean by hand or dishwasher. Spray "Formula 409®" or equivalent degreasing detergent and leave to soak if heavily soiled. Dry filters and re-install before using hood.

Replacing Filters:

- Should filters wear out due to age and prolonged use, please contact your local reseller for replacement filters.
- Note: Also replace damaged filter that has punctured or broken mesh, bent or broken frame.

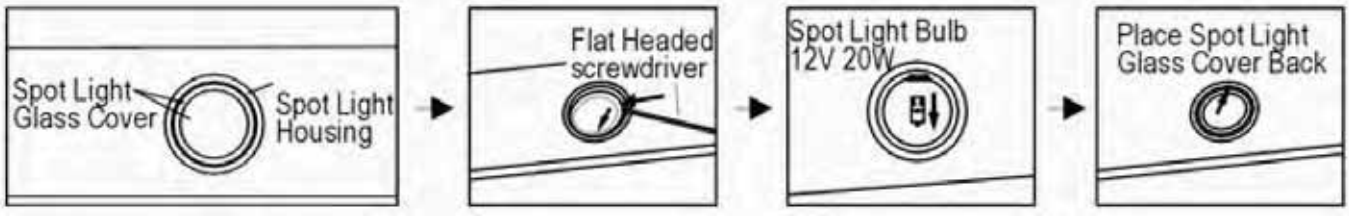
Replacing the light bulb:

- This range hood uses halogen bulb: 20W 12V.
  Product ID: SV168/198-ACS-HAL20W
  (please contact your local reseller for replacement)
- Make sure the range hood is unplugged or turn OFF breaker.
- Make sure the lights are cool to touch, turn the inner ring counter-clockwise with a small flat head screw driver then pop out the protective covering.
- Gently pull out the defective bulb and discard accordingly.
- Install a new halogen light bulb and reverse the steps.
- Turn ON breaker and range hood to test for operation.

WARNING

Hazard of Burns!

Light bulb become extremely hot when turned on. DO NOT touch bulb until switched off and cooled. Touching hot bulbs could cause serious burns.


Spot Light Glass Cover
Spot Light Housing
Flat Headed screwdriver
Spot Light Bulb 12V 20W
Place Spot Light Glass Cover Back

Warranty

TO OBTAIN SERVICE UNDER WARRANTY:

You must present proof of original purchase date.

Please provide an original dated proof of purchase (sales receipt / invoice) in order to obtain service under warranty.

Five Year Parts Warranty:

For five years from the date of original purchase, your local reseller will provide free of charge, non-consumable replacement parts or components that failed due to manufacturing defects. Subject to the conditions and limitations set forth below, your local reseller will, at its option, either repair or replace any part of its products that prove defective by reason of improper workmanship or materials. Repaired parts or replacement products will be provided by your local reseller on an exchange basis, and will be either new or refurbished to be functionally equivalent to new. The consumer is responsible for all shipping costs. Consumable parts not covered by this warranty include but not limited to: Light bulbs, metal, aluminum and charcoal filters.

Who is Covered:

This warranty is extended to the original purchaser for products purchased for ordinary home use.

This Warranty Will Be Voided When:

Product damaged through negligence, improper installation, accident, abuse, misuse, natural disaster, insufficient or excessive electrical supply, abnormal mechanical or environmental conditions, or any unauthorized disassembly, repair, modification, or failure to follow installation instructions. When product is used commercially or other than its intended purpose. Damaged because of improper connection with equipment of other manufacturers. Repaired or modified by anyone other than your local reseller's authorized agents. This limited warranty also does not apply to any product on which the original identification information has been altered, obliterated or removed, has not been handled or packaged correctly or has been sold as second-hand.

What is Not Covered:

Consumable parts such as light bulbs, metal and charcoal filters. The natural wear of finish, and wear due to improper maintenance, use of corrosive and abrasive cleaning products, pads, and oven cleaner products. Chips, dents or cracks due to abuse, misuse, freight damage, or improper installation. Damage of product caused by accident, fire, floods or act of God. The manufacturer and/or distributor/reseller is not liable for, and does not cover under warranty, any loss of properties or any costs associated with removing, servicing, installing, or determining the source of problems with this product.

This warranty is valid in the country of the original purchase at retail. It is non-transferable and applies only to the original purchaser and does not extend to subsequent owners of this product. Any applicable implied warranties, including the warranty of merchantability, are limited in duration to a period of express warranty as provided herein beginning with the date of original purchase at retail and, no warranties, whether express or implied, shall apply to this product thereafter.

To obtain warranty service, you may contact your local reseller from which you purchased this product. Please confirm the terms of your local reseller's policies prior to contacting. Typically, you must include product identification information, including model number and serial number with a detailed description of the problem you are experiencing. You must also include proof of the date of original retail purchase as evidence that the product is within the applicable warranty period.

Disclaimer

Carefully inspect all items for damages before accepting delivery. note any damages on the freight bill or express receipt. request name and signature of the carrier's agent and keep copy to support your claim. Upon acceptance of items, owner assumes responsibility for its safe arrival. Report damages to the carrier and file a claim immediately. Failure to do so may result in the denial of your claim. The carrier will furnish you with necessary forms for filing a claim.

Damages caused during transit are not covered under our warranty. Please contact us to file an insurance claim.

Please inspect contents of package(s) carefully upon receiving! We must be notified of any damages and/or missing parts within five (5) days upon your receipt of package(s). Claims will not be accepted after five (5) days. NOTE: Items were thoroughly tested and carefully packed in our factory before shipping.

Products must be returned in good working condition with ALL original parts and documentation packed in ALL original cartons, fillers and shipping cartons. Returns are subject to a 10 percent restocking fee, except when merchandise is exchanged for items of equal or greater amount. Exchanges or returns may not be accepted if any packaging is missing.

Make sure to inspect the hood for damages and defects before installation. Appearance flaws of the hood found after installation and not affecting hood performance is not covered under our warranty for returns or exchanges. Service visits not covered under warranty will carry a service charge.

Before Installation: Return for exchange or refund (please see above for acceptable returns).
After Installation: **NO** exchange or refund.

Contact Us

If you need any assistance, please contact Signature Hardware. Please have your order number and model of the range hood ready. This information will help us better respond to your request.

If you need replacement parts, we recommend that you only use genuine parts. Our accessories and parts are engineered and designed specifically for this series of range hood, each is rigorously tested assuring the utmost in durability and reliability, providing a factory match, factory-installed appearance and functionality tailored to each individual range hood model.

Contact Signature Hardware Customer Service :
1-866-855-2284

Monday - Thursday: 8:00a.m. to 11:00p.m.
Friday: 8:00a.m. to 7:00p.m.
Saturday: 8:00a.m. to 5:30p.m.
Sunday - closed

Your Notes

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